

Please replace the paragraph beginning on page 22, line 1, and ending on page 22, line 3, with the following paragraph:

B4
Returning now to FIG. 4A, after the analysis is completed and the binary bit map created at block 403, the reader method builds the IR for the component from the binary bit map at block 405. An IR build method 430 is illustrated FIG. 4C.

IN THE CLAIMS

Please amend Claim 38 as follows:

BS SEBE 1
38. The computer-readable medium of claim 37, further comprising:
translating a modified platform-specific binary into a modified plurality of intermediate representation instructions for further transformation.

REMARKS

Claim 38 has been amended in response to the Examiner's objection. The Related Applications section of the specification has been amended in response to the Examiner's objection.

The Examiner objected to the fact that items 410 and 430 are called out in the Drawings, but not mentioned in the specification. The Examiner proposed changes to address the objections. The Applicants appreciate the Examiner's proposed changes to the specification; however, the Applicants have amended the specification in a manner other than that proposed by the Examiner. The Applicants believe that, as amended, the specification addresses the Examiner's objections regarding items 410 and 430.

CONCLUSION

This supplemental amendment and response is believed to be responsive to all objections raised in the Office Action. Claims 1-15 and 17-43 remain pending in the application and are believed to clearly be allowable over the art of record. Accordingly, prompt allowance and passage of the application to issue are earnestly solicited. A separate markup with the claim amendments shown by bracketing and underlining is enclosed with this supplemental amendment in accordance with 37 C.F.R. 1.21. Should the Examiner have any remaining questions or concerns, she is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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S/N 09/343,805

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Chaiken et al.	Examiner:	Steelman, Mary J.
Serial No.:	09/343,805	Group Art Unit:	2122
Filed:	June 30, 1999	Docket No.:	124240.1 M&G60001.57US01
Title:	TRANSLATION AND TRANSFORMATION OF HETEROGENEOUS PROGRAMS		

AMENDMENTS -- MARKUP**Specification**

The present application is related to U.S. Patent applications entitled "Instrumentation and Optimization Tools for Heterogeneous Programs" [(attorney docket number 777.286US1),] Application Serial No.: 09/343,298; "Cross Module Representation of Heterogeneous Programs" [(attorney docket number 777.287US1),] Application Serial No.: 09/343,287; "Application Program Interface for Transforming Heterogeneous Programs" [(attorney docket number 777.289US1),] Application Serial No.: 09/343,276; and "Shared Library Optimization for Heterogeneous Programs" [(attorney docket number 777.291US1),] Application Serial No.: 09/343,279], filed on the same day as the present application and assigned to the same assignee]. Each of the above applications were filed on the same day as the present application and assigned to the same assignee.

Paragraph beginning on page 19, line 18, and ending on page 20, line 2.

The binary for a component is obtained (block 401) and analyzed (block 403). The process of analyzing a binary to discern its code blocks and data blocks is often referred to as "code discovery." [The] An exemplary embodiment of a code discovery operation 410 illustrated in FIG. 4B is described with reference to the methodology disclosed in U.S. Patent Number 5,664,191, assigned to the assignee of the present application. Various other code discovery methodologies are currently in use in the art and could be easily substituted by one of skill in the art in block 403.

Paragraph beginning on page 20, line 3, and ending on page 20, line 15.

In the exemplary embodiment, the PDB file 202 is assumed to contain entry points, export entry tables, jump tables, and symbol tables. A first approximation of the basic blocks is created at block 411 using the locations of procedures, labels, and data as defined in the PDB file 202. A bit map of the binary is created in which each bit represents an address in the binary. The beginning address of each block is marked in the bit map as either a code block or a data block. All entry points listed in the PDB file 202 are next marked in the bit map (block 413). The entry points are assumed to mark the beginning of a code block. At this point in the process, the length of a block is assumed to extend from its beginning mark in the bit map until another mark is encountered. However, a block marked as data can contain code that does not have an entry point. Because the component's creator knows where the various blocks begin and end, the process checks to see if [there] a user input command file was provided (block 415) and uses it, if available, to override any default designation of a code block as data (block 417).

Paragraph beginning on page 22, line 1, and ending on page 22, line 3.

Returning now to FIG. 4A, after the analysis is completed and the binary bit map created at block 403, the reader method builds the IR for the component from the binary bit map at block 405. An [The] IR build method 430 is illustrated FIG. 4C.

Claims

38. (Amended) The computer-readable medium of claim 37, further comprising:
translating the modified platform-specific binary into a modified plurality of intermediate representation instructions for further transformation.